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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,714	09/19/2003	David Hendler Sloo	MS1-1652US	6005

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EXAMINER	
WOODS, ERIC V	
ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/665,714	SLOO ET AL.	
	Examiner	Art Unit	
	Eric V Woods	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-62* is/are pending in the application.

4a) Of the above claim(s) *12-62* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-62* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-11, drawn to image processing and overlay, classified in class 345, subclass 629.

   II. Claims 12-62, drawn to scaling images and on-screen display graphics, classified in class 348, subclass 563+, specifically 564, 565, and 568, or 725/40 and 43.

2. Inventions Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as image overlay and merge, specifically for applications such as computer monitors and operating systems, particularly for dealing with still images. In the instant case, invention Group II has separate utility for generating picture-in-picture functionality for interactive television, and television in general. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Emmanuel Rivera (45,760) on April 26, 2005, at 2:20 p.m. EST a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11. Applicant in replying to this Office action must make affirmation of this election. Claims 12-62 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

6. Examiner accepts the specification, abstract, and title.

Drawings

7. Examiner accepts the drawings.

Notes

8. It is noted that from the specification that applicant has limited the use of the word 'format' in the claims to mean scaling or aspect ratio of a picture (e.g. 4:3, 16:9, 'letterbox'), as applicant provides numerous examples to this effect. Examiner will use the above definition. If applicant wishes to dispute this definition and/or usage of the term, applicant is required to so state in the next Office Action, and point to locations in the specification that provide countervailing evidence to that effect. Otherwise, for the prosecution of the instant application that definition will be used, and it will be assumed that applicant has limited that definition of the term to the above-recited definition as a matter of record.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. The term "similar in appearance" in claim 4 is a relative term that renders the claim indefinite. The term "similar in appearance" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Therefore, applicant is required to state what is meant by this term. Examiner will operate (for purposes of prior art rejections only) under the interim assumption that the term may be equivalent to "displaying the same image at a different scale".

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent; except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) and (e) as being anticipated by Schein et al (US 6,323,911). A reference that teaches the apparatus prima facie

teaches the method if the reference is analogous art and directed to the same problem solving area.

14. As to claims 1 and 8, Schein teaches a system for displaying information on a television, which, as shown in Figs. 5B and 5C, particularly 5B, is capable of displaying a full-size image 132 on a display screen (10:30-10:65) while displaying an on-screen display (or graphical user interface in applicant's terminology) 130 on the screen, with a scaled version of image 132 shown as image 134, which is prima facie overlaid upon the larger, full scale image 132, as is the graphical user interface 130, which is positioned next to the scaled image 134 without obscuring it, thusly meeting the required limitations of the claim (10:30-10:65). As is clearly stated, the "InfoMenu" window (e.g. element 130) shows a live version of whatever program is being examined in the menu, which if the current program were selected, it would thusly be showing it live, as recited in the claim. Further, Fig. 5B clearly shows that the scaled image 134 can be the same as that of the main display 132.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cesana et al (US 6,466,220 B1). A reference that teaches the apparatus prima facie teaches the method so long as it is analogous art.

17. As to claims 1 and 8, Cesana teaches in Fig. 6 that images are divided into different planes before being combined, such that Display 640 can show a background 600 with a scaled video window 610 and a scaled graphics window 620, which is inherently capable of performing the recited limitations. In 8:9-8:45, it is taught that background plane 800 can be a flow-through video stream, and scaled video plane 610 can be used to provide PIP functionality or similar, while scaled graphics plane 620 clearly can show on-screen graphics, menus, and similar functionality. Clearly, such a system can perform the steps recited in the apparatus of claim 1, and as the system of claim 1 is clearly rendered obvious in light of it; obviously, it is well known in the art to have the secondary window show a scaled version of the primary video stream (see Schein for example).

18. Claims 2-4, 7, 9, and 11 are rejected under 35 U.S.C. 103(a) as unpatentable over Schein as applied to claim 1 above, and further in view of Ichihara (US 5,455,632).

Reference Schein teaches the all the limitations of the parent claim except the PIP window having a different format than that of the main image. Reference Ichihara clearly teaches in Figs. 3(a) and 3(b) the use of 'Squeeze mode' (e.g. normal mode') and 'Letterbox' mode (e.g. wide-screen for movies)(1:60-2:15). Further, Ichihara teaches in 2:20-2:50 that the sub-picture can have a 4:3 aspect ratio versus the main picture having a 16:9 aspect ratio. Figs. 4(a)-4(d) clearly reflect situations in which the format of the sub-picture is clearly tuned to be different than that of the main window, e.g. 4(c) wherein the main picture is operating in Normal mode and the PIP window is operating in Letterbox or Squeeze mode, with more details provided in Figs. 7(a)-7(d),

where the trimming is applied by the circuit in Fig. 6 (6:3-7:25). Also, the system allows for the use of arbitrary aspect ratios (3:20-4:30). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Schein with that of Ichihara wherein the system of Schein allows more control over the aspect ratio of the displayed image so that the system of Schein would display a more pleasant PIP with increased circularity when used on a television or display having 4:3 and/or 16:9 resolution (Ichihara 1:15-2:30 and 3:15-4:30), and further to allow the user to choose the desired format of the displayed image.

19. As to claim 3, Schein does not teach this limitation expressly, whereas Ichihara teaches (2:45-3:50) the use of a selector circuit such that the user can select the display mode of the main picture and the sub-picture. Motivation and combination are taken from claim 2 above and incorporated by reference.

20. As to claim 4, Schein clearly teaches (as taught in the rejection to claim 1 above) and as shown in Fig. 5B that the two images are similar, e.g. that they are the same thing in a different scale factor. Since only the primary reference is utilized, no separate motivation or combination is required and that from the rejection to the parent claim is herein incorporated by reference.

21. As to claim 7, Schein clearly teaches that the user can have different menus on screen (e.g. Figs 4A-11C all show various menus that the user can select, that is, various versions of the graphical user interface, specifically see Figs. 5A-5C). In addition, this is trivially well known in the art, e.g. the remote control is used to select different functionality, see for example Figs. 1 and 2, with buttons for selecting various

menu options, and further in 4:55-7:32. Since only the primary reference is utilized, no separate motivation or combination is required and that from the rejection to the parent claim is herein incorporated by reference.

22. As to claim 11, this is the same thing as claim 7 above, wherein the user provides instructions via the remote control shown in Fig. 1, where prima facie the system must receive the instructions from the user to modify the menu shown on the screen of the apparatus. Motivation is taken from the parent claim and herein incorporated by reference. Since only the primary reference is utilized, no separate motivation or combination is required and that from the rejection to the parent claim is herein incorporated by reference.

23. Claims 5-6 and 10 are rejected under 35 U.S.C. 103(a) as unpatentable over Schein in view of Yu (US 2004/0117819 A1).

24. As to claims 5 and 10, Schein teaches all the limitations except explicitly stating that the scaled picture is placed along a left side of the full screen, while Yu teaches that the sub-picture or PIP window can be placed in the lower left corner of the screen in [0075]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the PIP and scaling of Schein with Yu because Yu allows the user to control the position of the PIP window so that the user may place it (e.g. the scaled video) in the preferred position so as to not obscure some desired part of the full image (location of placement of PIP window is a design choice or preference in any case), see In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). Also, if the claim is directed towards picture-on-picture (POP) technology, wherein the pictures are

displayed side-by-side on the screen, that is well known in the television art and has been for over a decade (see for example US 5,847,771 to Cloutier (1:12-2:60) and US 5,459,528 to Pettitt (1:15-40), et cetera). Therefore, that would be a simply obvious and trivial variant of the above, and it would obvious that the system of Yu could also perform that functionality, as the circuitry involved would be the same (see Cloutier (1:12-2:60)).

25. As to claim 6, Yu teaches in [0075] that the system controller 161 in Figs. 1 and 3 can control the position of the Sub Picture 2.2, and in [0082] it is disclosed that arrow keys can be used to make selections, which imply that the user could move the PIP window move. As such, the claim would be obvious over the prior art. Motivation and combination is taken from the parent claim.

26. Claim 6 is rejected under 35 U.S.C. 103(a) as unpatentable over Schein in view of Karaoguz et al (US 2004/0117823).

As to claim 6, reference Schein does not explicitly teach that the PIP window can moved, whereas reference Karaoguz clearly teaches in [0050] that the user can position the PIP window wherever desired on the screen so as to achieve a more flexible viewing experience [0050], thusly providing motivation for combination with Schein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-4:30 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric Woods

JEFFERY BRIER
PRIMARY EXAMINER

April 26, 2005